

# Tables: Tools for Organizing Data

SI539 - Lloyd Chapter 6

These slides intended for use with the text book, “Building your Own Web Site the Right Way Using HTML & CSS” by Ian Lloyd, and Available from Sitepoint books.

# Tables are for Rows and Columns

- When you have something that looks like a spreadsheet - - with rows and columns and optionally headers and footers - use a table
- It is the *\*right\** thing to use a table when presenting tabular data

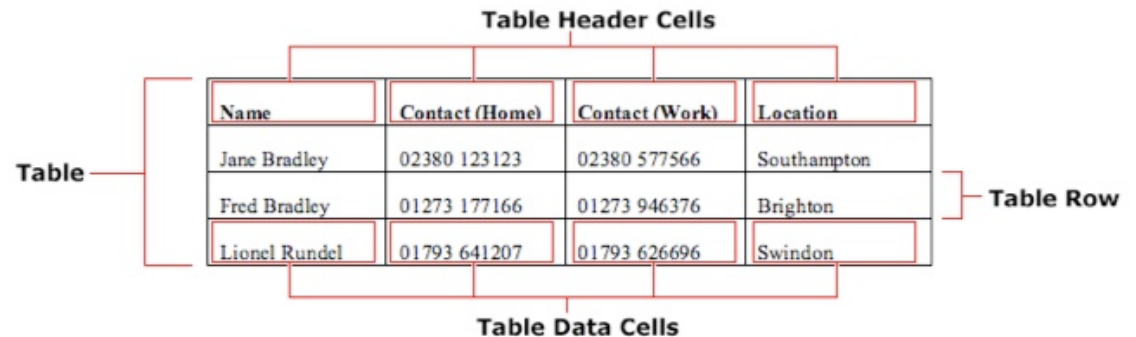
Name	Contact (Home)	Contact (Work)	Location
Jane Bradley	02380 123123	02380 577566	Southampton
Fred Bradley	01273 177166	01273 946376	Brighton
Lionel Rundel	01793 641207	01793 626696	Swindon

# Tables are *\*not\** for Layout

- Better accessibility - when tables are used for layout the HTML ends up cluttered with extra tags which are there for layout only
- Because the browser must lay out table cells based on their contents and the contents of the other cells it forces the browser to wait until the whole page is downloaded (including embedded images) before page elements can be placed in their final on-screen position.
- When tables were used for graphic layout - table tags would be nested inside table tags simply to add a border - making the process even slower

# Anatomy of a Simple Table

```
<table>
<tr>
  <th>Name</th>
  <th>Contact (Home)</th>
  <th>Contact (Work)</th>
  <th>Location</th>
</tr>
<tr>
  <td>Jane Bradley</td>
  <td>02380 123123</td>
  <td>02380 577566</td>
  <td>Southampton</td>
</tr>
<tr>
  <td>Fred Bradley</td>
  <td>01273 177166</td>
  <td>01273 946376</td>
  <td>Brighton</td>
</tr>
<tr>
  <td>Lionel Rundel</td>
  <td>01793 641207</td>
  <td>01793 626696</td>
  <td>Swindon</td>
</tr>
</table>
```



# Tables *\*need\** Styling

- The default look and feel of tables is so poor the you might be tempted to start adding styling in-line
- Avoid that temptation - use CSS even if in the <head> area

<b>Name</b>	<b>Contact (Home)</b>	<b>Contact (Work)</b>	<b>Location</b>
Jane Bradley	02380 123123	02380 577566	Southampton
Fred Bradley	01273 177166	01273 946376	Brighton
Lionel Rundel	01793 641207	01793 626696	Swindon

# Basic Styling

- Looks *\*like\** a table of rows and columns

```
<style type="text/css">
table {
  border-collapse: collapse;
  border: 1px solid black;
}
th {
  text-align: left;
  background: gray;
  color: white;
  padding: 0.2em;
}
td {
  border: 1px solid black;
  padding: 0.2em;
}
</style>
</head>
<body>
<table>
  <tr>
    <th>Name</th>
    <th>Contact (Home)</th>
    <th>Contact (Work)</th>
    <th>Location</th>
  </tr>
```

Name	Contact (Home)	Contact (Work)	Location
Jane Bradley	02380 123123	02380 577566	Southampton
Fred Bradley	01273 177166	01273 946376	Brighton
Lionel Rundel	01793 641207	01793 626696	Swindon

# Different Tables

## Different Styles

```
table.rates {  
  /* declarations for rates tables */  
}
```

```
table.schedule {  
  /* declarations for schedule tables */  
}
```

```
table.events {  
  /* declarations for events tables */  
}
```

<table class="rates">

Again mark tables semantically - and then style in CSS.

# Accessible Tables

- Use headers <th> for header material
- Use <caption> for on-screen summary
- Use summary attribute of table tag for off-screen summary

```
<table  
  summary="Area representatives, and  
  their telephone numbers">  
  <caption>  
    Contact details  
  </caption>  
  <tr>  
    <th>Name</th>  
    <th>Contact (Home)</th>  
    <th>Contact (Work)</th>  
    <th>Location</th>  
  </tr>  
  ...
```



# Advanced Styling

- Colors and background images can make tables very attractive
- It all belongs in the styling - not inline



The screenshot shows the BubbleUnder.com website. The header features the site name and a tagline. A sidebar on the left contains navigation links. The main content area is titled 'Forthcoming Club Events' and includes a paragraph of text. Below this is a table titled 'Club events/dive trips for the next six months' with four columns: Date, Event Description, Approximate Cost, and Contact. The table lists four events.

**BubbleUnder.com**  
*Diving club for the south-west UK - let's make a splash!*

[Home](#)  
[About Us](#)  
[Club Events](#)  
[Contact Us](#)  
[Image Gallery](#)

### Forthcoming Club Events

Bubble Under members love meeting up for dive trips around the country. Below are all the dive trips that we currently have planned. For more information about any of them, please get in contact with that event's organizer.

**Club events/dive trips for the next six months**

Date	Event Description	Approximate Cost	Contact
12 July	Committee meeting, deciding on next year's trips	N/A	Bob Dobalina
19 July	7-day trip to Hurghada (package deal) - limited spaces	£260 pp (all inclusive), departing Luton	Bob Dobalina
5 August	Ocean & Sports Diver Theory Course	Call for details	Jeff Edgely
12 August	Murder Mystery Weekend, Cotswolds (no diving!)	£65 pp (accommodation included)	Jill Smith

# Merging Table Cells

- colspan and rowspan indicate that a particular <th> or <td> element is more than one row or column
- colspan is more commonly used

Date	Event Details		Contact
	Event Description	Approximate Cost	
12 July	Committee meeting, deciding on next year's trips	N/A	Bob Dobalina
19 July	7-day trip to Hurghada (package deal) – limited spaces	£260 pp (all inclusive), departing Luton	Bob Dobalina
5 August	Ocean & Sports Diver Theory Course	Call for details	Jeff Edgely
12 August	Murder Mystery Weekend, Cotswolds (no diving!)	£65 pp (accommodation included)	Jill Smith

```
<table>
  <tr>
    <th rowspan="2">Date</th>
    <th colspan="2">Event Details</th>
    <th rowspan="2">Contact</th>
  </tr>
  <tr>
    <th>Event Description</th>
    <th>Approximate Cost</th>
  </tr>
```

# Advanced Headers

- When making a two dimensional table you can put in row headers.

	Departure Time	Platform	Buffet Coach
Southampton	13:03	12	Yes
Edinburgh	14:47	4	Yes
Newcastle	15:55	7	No

Diagram illustrating the table structure with row and column headers. A red box highlights the first row (headers), and a blue box highlights the first column (row headers). Arrows indicate the scope of the headers: a red arrow points right from the first row header, and a blue arrow points down from the first column header.

```
<table>
<caption>Train times and departures</caption>
<tr>
  <td></td> <!-- top-right corner -->
  <th scope="col">Departure Time</th>
  <th scope="col">Platform</th>
  <th scope="col">Buffet Coach</th>
</tr>
<tr>
  <th scope="row">Southampton</th>
  <td>13:03</td>
  <td>12</td>
  <td>Yes</td>
```

# Summary

- Tables have gotten a bad name because they were abused for years to hack layout
- But tables are very well-suited for displaying tabular data
- The key is to remember to use tables to mark tabular data and heading information semantically - not as a layout mechanism
- Think about accessibility when building a table